



DATE: June 17, 2004 SHEET 1 of 2

## Form PTO - 1449 (Modified)

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE  
(Modified) PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

(37 CFR 1.98 (b))

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APPLICANT

R. Kurukulasuriya et al.

FILING DATE

December 23, 2003

GROUP

1614 1626

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER							ISSUE DATE	PATENTEE	CLASS	SUB CLASS	FILING DATE
NG	A1	5	7	7	6	9	5	4	07/07/98	de Laszlo, et al.	—	—	
NG	A2	5	8	8	0	1	3	9	03/09/99	Chang	—	—	
NG	A3	6	2	1	8	4	3	1	04/17/2001	Schoen, et al.	—	—	

## FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER							PUBLI- CATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUB CLASS	TRANS- LATION	
													YES	NO
NG	B1	9	7	1	6	4	4	2	09.05.97	WO	—	—		
NG	B2	9	8	2	1	9	5	7	28.05.98	WO				
NG	B3	9	8	2	2	1	0	8	28.05.98	WO				
NG	B4	9	8	2	2	1	0	9	28.05.98	WO				
NG	B5	9	9	0	1	4	2	3	14.01.99	WO				
NG	B6	0	0	3	9	0	8	8	06.07.2000	WO				
NG	B7	0	0	6	9	8	1	0	23.11.2000	WO				
NG	B8	0	2	0	0	6	1	2	03.01.2002	WO				
NG	B9	0	2	4	0	4	4	4	23.05.2002	WO				
NG	B10	0	2	4	0	4	4	5	23.05.2002	WO				
NG	B11	0	2	4	0	4	4	6	23.05.2002	WO	—	—		

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

NG	C1	Ahrén, B., & Larsson, H., "Impaired glucose tolerance (IGT) is associated with reduced insulin-induced suppression of glucagon concentrations", <i>Diabetologia</i> , 44:1998-2003 (2001)
NG	C2	Baron, A. C., et al., "Role of Hyperglucagonemia in Maintenance of Increased Rates of Hepatic Glucose Output in Type II Diabetics", <i>Diabetes</i> , 36:274-283 (1987)
NG	C3	Brand, C. L., et al., "Evidence for a Major Role for Glucagon in Regulation of Plasma Glucose In Conscious, Nondiabetic, and Alloxan-Induced Diabetic Rabbits", <i>Diabetes</i> , 46:1076-1083 (1996)
NG	C4	Brand, C. L., et al., "Immunoneutralization of endogenous glucagon with monoclonal glucagon antibody normalizes hyperglycaemia in moderately streptozotocin-diabetic rats", <i>Diabetologia</i> , 37:985-993 (1994)
NG	C5	Brand, C. L., et al., <i>American Diabetes Assn Poster Session in San Antonio, TX</i> , pgs. A81 & A428 (2000)
NG	C6	Cascieri, M. A., et al., "Characterization of a Novel, Non-peptidyl Antagonist of the Human Glucagon Receptor", <i>The Journ. of Biol. Chem.</i> 1999, 274:8694-8697 (1999)
NG	C7	Chang, L. L., et al., "Substituted Imidazoles as Glucagon Receptor Antagonists", <i>Bioorganic &amp; Med. Chem. Ltrs.</i> , 11:2549-2553 (2001)
NG	C8	de Feo, P., et al., "Contribution of cortisol to glucose counterregulation in humans", <i>Am. J. Physiol.</i> 257:E35-E42 (1989)
NG	C9	de Laszlo, S. E., et al., "POTENT, ORALLY ABSORBED GLUCAGON RECEPTOR ANTAGONISTS", <i>Bioorganic &amp; Med. Chem. Ltrs.</i> , 9:641-646
NG	C10	DeFronzo, R. A., "Pathogenesis of type 2 diabetes: metabolic and molecular implications for identifying diabetes genes", <i>Diabetes Reviews</i> , 5(3):177-269 (1997)

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NG	C11	Dinneen, S., et al., "Metabolic Effects of the Nocturnal Rise in Cortisol on Carbonhydrate Metabolism in Normal Humans", <i>J. Clin. Invest.</i> 92:2283-2290 (1993)
NG	C12	Dobbs, R., et al., "Glucagon: Role in the Hyperglycemia of Diabetes Mellitus", <i>Science</i> , 187:544-547 (1975)
NG	C13	Friedman et al., <i>J. Biol. Chem.</i> 272(50):31475-31481 (1997)
NG	C14	Guillon, J., et al., "Synthesis of new pyrrolo[1,2- $\alpha$ ]quinoxalines: potential non-peptide glucagon receptor antagonists", <i>Eur. J. Med. Chem.</i> , 33:293-308 (1998)
NG	C15	Ladouceur, G. H., et al., "4-Phenylpyridine glucagon receptor antagonists: synthetic approaches to the sterically hindered chiral hydroxy group", <i>Tetrahedron Ltrs.</i> , 43:4455-4458 (2002)
NG	C16	Ladouceur, G. H., et al., "Discovery of 5-Hydroxyalkyl-4-phenylpyridines as a New Class of Glucagon receptor Antagonists", <i>Bioorganic &amp; Med. Chem. Ltrs.</i> , 12:461-464 (2002)
NG	C17	Langley et al., <i>Am. J. Physiol.</i> 259(Regulatory Integrative Comp. Physiol. 28):R539-R544 (1990)
NG	C18	Ling, A., et al., "Human Glucagon Receptor Antagonists Based on Alkylidene Hydrazides", <i>Bioorganic &amp; Med. Chem. Ltrs.</i> , 12:663-666 (2002)
NG	C19	Ling, A., et al., "Identification of Alkylidene Hydrazides as Glucagon Receptor Antagonists", <i>J. Med. Chem.</i> , 44:3141-3149 (2001)
NG	C20	Madsen, P., et al., "Discovery and Structure-Activity Relationship of the First Non-Peptide Competitive Human Glucagon Receptor Antagonists", <i>J. Med. Chem.</i> , 41:5150-5157 (1998)
NG	C21	Magnusson, I., et al., "Increased Rate of Gluconeogenesis in Type II Diabetes Mellitus A 13C Nuclear Magnetic Resonance Study", <i>J. Clin. Invest.</i> , 90:1323-1327 (1992)
NG	C22	Parker, J. C., et al., "Effects of Strykin, a Receptor-Selective Glucagon Antagonist, in Rat and Human Hepatocytes", <i>Diabetes</i> , 49:2079-2086 (2000)
NG	C23	Petersen K. F. & Sullivan, J. T., "Effects of a novel glucagon receptor antagonist (Bay 27-9955) on glucagon-stimulated glucose production in humans", <i>Diabetologia</i> , 44:2018-2024
NG	C24	Post, S. R., et al., "Mechanism of Action of des-His <sup>1</sup> [Glu <sup>27</sup> ]glucagon amide, a peptide antagonist of the glucagon receptor system", <i>Proc. Natl. Acad. Sci. USA</i> , 90:1662-1666 (1993)
NG	C25	Reaven, G. M., et al., "Documentation of Hyperglucagonemia Throughout the Day in Nonobese and Obese Patients with Noninsulin-Dependent Diabetes Mellitus", <i>J. of Clin. Endocrin. &amp; Metab.</i> , 64:106-110 (1987)
NG	C26	Rizza, R., et al., "Effect of Intermittent Endogenous Hyperglucagonemia on Glucose Homeostasis in Normal and Diabetic Man", <i>J. Clin. Invest.</i> , 63:1119-1123 (1979)
NG	C27	Rooney, D. P., et al., "The Effect of Cortisol on Glucose/Glucose-6-Phosphate Cycle Activity and Insulin Action", <i>J. Clin. Endocrin. &amp; Metabol.</i> , 77:1180-1183 (1994)
NG	C28	Shah, P., et al., "Impact of lack of suppression of glucagon on glucose tolerance in humans", <i>Am. J. Physiol.</i> , 277:E283-E290 (1999)
NG	C29	Shah, P., et al., "Lack of Suppression of Glucagon Contributes to Postprandial Hyperglycemia in Subjects with Type 2 Diabetes Mellitus", <i>J. Clin. Endocrinol. &amp; Metabol.</i> , 85:4053-4059 (2000)
NG	C30	Smith, R. A., "Optimization of the 4-Aryl Group of 4-Aryl-pyridine Glucagon Antagonists: Development of an Efficient, Alternative Synthesis", <i>Bioorganic &amp; Medicinal Chem. Ltrs.</i> , 12:1303-1306 (2002)
NG	C31	Terleckyj, I., et al., "The Glucagon Receptor Antagonist ALT 3000 Lowers Fasting Hyperglycemia in Rat Models of Diabetes", <i>Diabetes</i> , 45:220A (1996)
NG	C32	Unger, R. H., & Orci, L., "Glucagon", <i>Joslin's Diabetes Mellitus</i> , Chapt. 9:163-176 (1994)
NG	C33	Unger, R. H., "Glucagon physiology and pathophysiology in the light of new advances", <i>Diabetologia</i> , 28:574-578 (1985)
NG	C34	Unger, R. H., "Role of Glucagon in the Pathogenesis of Diabetes: The Status of the Controversy", <i>Metabolism</i> , 27(11):1691-1709 (1978)
NG	C35	Unger, R. H., "THE ESSENTIAL ROLE OF GLUCAGON IN THE PATHOGENESIS OF DIABETES MELLITUS", <i>Lancet</i> , 1:14-16 (1975)
NG	C36	Unson, C. G., et al., "Biological Activities of des-His <sup>1</sup> [Glu <sup>27</sup> ]Glucagon Amide, a Glucagon Antagonist", <i>Peptides</i> , 10:1171-1177 (1989)
NG	C37	Unson, C. G., et al., "Multiple-site Replacement Analogs of Glucagon", <i>Jour. of Biol. Chem.</i> , 269(17):12548-12551 (1994)
NG	C38	Walker et al., <i>Am. J. Physiol.</i> 262(Endocrinol. Metab. 25):E110-E117 (1992)
NG	C39	Wright, L. M., et al., "Structure of Fab hGR-2 F6, a competitive antagonist of the glucagon receptor", <i>Acta Cryst.</i> , D56:573-580 (2000)
	C40	Ziezech, B. Y., et al., "[des-His <sup>1</sup> , des-Phe <sup>27</sup> , Glu <sup>28</sup> ]GLUCAGON-AMIDE: A NEWLY DESIGNED "PURE" GLUCAGON ANTAGONIST", <i>Bioorganic &amp; Medic. Chem. Ltrs.</i> , 5(16):1849-1852 (1995)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Amend  
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